Abstract

Systems and methods are disclosed for controlling, diagnosing and prognosing the health of a motorized system. The systems may comprise a diagnostics system, a prognostic system and a controller, wherein the diagnostics system and/or prognostic system employs a neural network, an expert system, and/or a data fusion component in order to assess and/or prognose the health of the motorized system according to one or more attributes associated therewith. The controller may operate the motorized system in accordance with a setpoint and/or a diagnostics signal from the diagnostics system and/or prognostic information. Also disclosed are methodologies for controlling, diagnosing and prognosing the health of a motorized system, comprising operating a motor in the motorized system in a controlled fashion, diagnosing and/or prognosing the health of the motorized system according to a measured attribute associated with the motorized system, wherein the motor may be operated according to a setpoint and/or the diagnostics signal and/or prognosis.